USACHPPM TODAY

Volume 7, No. 1 February 2000
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Eye Injuries, are you prepared?

USACHPPM TODAY

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LET US KNOW

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INSIDE THIS ISSUE

Deputy for Technical Services

THANK YOU AND OTHER AMENITIES

By: Mr. Stephen L. Kistner

The pace of life, the stress level, the OPTEMPO, or whatever you want to label it, has increased considerably in the recent past. So much so that even the coolest under pressure feel the effects and impacts of the deadlines, the quick turnaround times, or the time-sensitive responses. I would like to say that there's a light at the end of the tunnel; however, in all truthfulness, I don't believe that is the case. The price you pay for doing an outstanding job on a lot of really difficult problems – is a lot more tough problems to solve. And as the word gets out that the USACHPPM:

- Provided insightful advice on a sticky problem, or
- Came up with innovative approaches to assess the health of deployed troops, or
- Presented in-depth technical answers in a way that a non-technical decision maker could understand and implement an informed course of action, then the ultimate result is more inquiries, higher expectations, and more balls to juggle. Success breeds success!

So far I guess I've stated the obvious. However, what I want to do is sincerely say "Thank you" for all your dedication, your exceptional intellectual capacities, your innovative ideas, your loyalty, your teamwork, but more importantly for your hard work. In an era where resources are constrained, where budgets are tight, and where personnel cutbacks have impacted many Department of Defense organizations, the people of USACHPPM have set high standards and exceeded all expectations in accomplishing this Center's mission. I hope you are as proud of your accomplishments as I am.

I know that our corporate values identify people as "our most valued resource". I also know that the legacy of this organization talks to "The USACHPPM Family" and being more than just a place to work. However, as the mission of the Center has grown, as the number of people carrying out that mission has increased, and as already stated, everyone is very busy doing their thing, it is very easy to forget how all these fine efforts get done. It takes the committed efforts of over 1,000 people from a very diverse array of technical, administrative, and managerial specialties working toward a common purpose to make this happen — not an easy task but one that all of you perform on a daily basis. You are truly a great bunch of people who have worked together and accomplished a great deal.

Finally, to close the loop on this theme of remembering what is really important in our value system and in our lives, I'd like to leave you with a few things to think about. Borrowing from some of my friends at USACHPPM-North, I ran across this essay that has helped me assess my priorities and to keep things in perspective. As we move into the new millennium, let's make sure we remind each other what is really important.

The Paradox of Our Time

By George Carlin

The paradox of our time in history is that
We have taller buildings, but shorter tempers;
Wider freeways, but narrower viewpoints.
We spend more, but have less;
We buy more, but enjoy it less.
We have bigger houses and smaller families;
More conveniences, but less time;
We have more degrees, but less sense;
More knowledge, but less judgment;
More experts, yet more problems;
More medicine, but less wellness.
We drink too much, smoke too much, spend too recklessly,
Laugh too little, drive too fast, get too angry, stay up too late,
Get up too tired, read too little, watch TV too much,
And pray too seldom.
We have multiplied our possession, but reduced our values.
We talk too much, love too seldom, and hate too often.
We've learned how to make a living, but not a life;
We've added years to life, not life to years.
We've been all the way to the moon and back,
But have trouble crossing the street to meet the new neighbor.
We've conquered outer space, but not inner space.
We've done larger things, but not better things.
We've cleaned up the air, but polluted the soul.
We've conquered the atom, but not our prejudice.
We write more, but learn less.
We've learned to rush, but not to wait.
We plan more, but accomplish less.
We build more computers to hold more information to produce more copies than ever,
But we communicate less and less.
These are the times of fast foods and slow digestion,
Big men and small character, steep profits and shallow relationships.
These are the times of world peace but constant conflict,
More leisure but less enjoyment,
More kinds of food but less nutrition.
These are days of two incomes but more divorce,
Fancier houses but broken homes.
These are the days of quick trips, disposable diapers, throwaway morality, one-night stands, Overweight bodies, and pills that do everything from cheer to quiet, to kill.
It is a time when there is much in the show window and nothing in the stockroom,
A time when technology can bring this letter to you,
And a time when you can choose either to share this insight,
Or to just hit delete.

Again, my co-workers and friends – Thank you so very much!

MARTINEZ-LOPEZ ACCEPTS USACHPPM COMMAND

LTG Ronald R. Blanck, right, hands the guidon of USACHPPM to BG Lester Martinez-Lopez.

BG Bettye H. Simmons passed command responsibility for USACHPPM to BG Lester Martinez-Lopez on January 24. The ceremony was held at the Edgewood Area's Maryland National Guard Armory and featured the 389th Army Band (AMC's Own). A reception was held at the Gunpowder Club following the ceremony.

The Army Surgeon General and Commanding General, U.S. Army Medical Command, LTG Ronald R. Blanck, hosted the ceremony. He thanked Simmons for her leadership and competence and awarded her the Distinguished Service Medal for her performance as Commander. Simmons has been commander since April 22, 1999. She also served as Chief, Army Nurse Corps since December 1995. Her previous assignments include deputy installation commander for Fort Sam Houston, Texas; deputy commander, U.S. Army Medical Department Center and School; chief nurse, U.S. Army Medical Command; and designated consultant to The Surgeon General for Nursing Administration.

Martinez-Lopez comes to USACHPPM from Fort McPherson, Georgia, where he served as Command Surgeon, U.S. Army Forces Command. Previous assignments include division surgeon, 4th Infantry Division, Fort Carson, Colorado from 1988 to 1990. He was then reassigned to Martin Army Community Hospital, Fort Benning, Georgia, where he served as the Chief, Department of Family Practice and Community Medicine from 1990 to 1993. In 1994 he became the Commander of the 86th Combat Support Hospital, Fort Campbell, Kentucky. From May 1995 to October 1995, he served as Commander, Task Force 86 (Medical) and Chief Medical Officer, U.S. Mission in Haiti. From June 1996 to May 1998, he served as Director of Health Services/Commander, U.S. Army Medical Department Activity and Commander, Blanchfield Army Community Hospital, Fort Campbell, Kentucky. Since 20 May 1998, he has been the Commander, Martin Army Community Hospital and PROFIS Commander of the 14th Field Hospital, Fort

Benning, Georgia. During November and December 1998, he also served as the JTF Aguila Surgeon (Hurricane Mitch Relief) in Central America. His military education includes the Army Medical Department Officers' Basic and Advanced Courses, the U.S. Army Command and General Staff College, and the Army War College.

His personal awards, decorations, and badges include the Legion of Merit with two oak leaf clusters, the Defense Meritorious Service Medal, the Army Meritorious Service Medal with three oak leaf clusters, the Army Commendation Medal with one oak leaf cluster, the Army Achievement Medal with one oak leaf cluster, and the Senior Flight Surgeon Badge. He is a diplomate of the American Board of Family Practice and the American Board of Preventive Medicine and a fellow of the American Academy of Family Practice.

Martinez-Lopez is married to the former Lydia Ramirez-Kurtz. They have three sons, Lester, Luis, and Lucas.

FORCE HEALTH PROTECTION CONFERENCE

The 3rd Annual Force Health Protection Conference will be held August 7-11, 2000, at the Convention Center, Baltimore, Maryland. Last year's conference was organized by track specific topics; this year the conference will offer breakout sessions of interest to wider audiences. The conference will integrate various aspects of preventive medicine to give attendees a choice of topics in their areas of interest. Registration may be completed electronically by clicking on the FHP icon on the USACHPPM home page on the Internet or going directly to:
http://chppm-www.apgea.army.mil/fhp/

BRIGHT STAR EXERCISE- 1999-2000

Handwashing Facilities

Preventive Medicine (PM) cannot be overemphasized when it comes to keeping soldiers healthy and ready to do their job whether it is on a battlefield or a multinational exercise. The AMEDD also must ensure that our soldiers are protected from all of the threats they face as well as help the sick and the injured.

In September, soldiers from the 520th Theater Army Medical Laboratory (TAML), Aberdeen Proving Ground, MD; and the 155th PM Detachment, Fort Bragg, NC, departed for Egypt to participate in Operation Bright Star. It was the largest exercise in the U.S. Central Command region since the Persian Gulf War with approximately 78,000 service members from 11 nations participating. Defense Secretary William S. Cohen said that the coalition participating in Bright Star is building a long-term relationship that will provide the security that our people want and the stability that they deserve. He said Bright Star is more than an exercise, that it is a statement that the coalition is getting stronger. "We are training for the purpose of maintaining readiness, interoperability, and to prepare for any contingency for the future," Cohen said.

The units, departing on 9 September and returning on 5 November 1999, consisted of the following soldiers: TAML: LTC Scott A. Stanek, Officer in Charge; CPT Jerry J. Fogg; CPT Martin Sanders; SPC William Bryant; SPC Robert L. Spencer; and SPC Steven W. Boyd. 155th PM Detachment, Fort Bragg, NC: MAJ Sheryl Kennedy, Commander; SFC Jeff Crainich, Detachment Sergeant; Non Commissioned Officer in Charge; LT Walter Roachell, Detachment XO with SPC Socorro Gavino as the team leader and SPC Suzanne Dunning and PFC Daniel Quartucci as team members. Kennedy and Roachell remained until 16 November to cover any PM issues surfacing during redeployment and to continue

disease and non battle injury (DNBI) collection. (NOTE: LTC Stanek and CPT Fogg are PROFIS from USACHPPM; CPT Sanders is PROFIS from WRAIR.)

For the two units, PM was an opportunity for the U.S., the North Atlantic Treaty Organization, and Middle Eastern forces to conduct joint exercises, a real world mission, and to prevent food and waterborne disease as well as to control insects and rodents. In addition, they conducted joint medical environmental surveillance for all U.S. Forces while deployed that consisted of air, water, and soil sampling/monitoring in the areas of operation.

Kennedy said, "The mission was to provide PM support to all U.S and coalition forces at Mubarak Military City, Agami, and the Port of Dukhaylah throughout the Bright Star Exercise. Our primary focus was on pest management, water testing, food, and sanitation, but we also provided support on housing issues, industrial hygiene issues, recreational waters, and others. This was a very comprehensive exercise for PM as it encompassed all areas that we are trained in. It was an excellent opportunity for my young soldiers to see how PM functions and what effect we can have in maintaining the health of the command." Disease and non-battle illness data on U.S. Forces participating in Bright Star were also collected.

Host nation's, as well as U.S. Forces', food service operations were continually monitored and inspected to insure compliance with current regulations. Inspections of food service facilities included proper hygiene, food temperatures, food storage, and food service practices. Deficiencies were noted and recommendations made to solve potential problems. Deficiencies that were not corrected ultimately resulted in food service facilities being off limits to U.S. Forces. Water surveillance was conducted by taking samples from raw water sources as well as treated water sources to check for bacteria and other contaminants. Tests were conducted both in the field and in the U.S.Army Center for Health Promotion and Preventive Medicine's laboratories. This procedure ensured soldiers received potable water and prevented waterborne diseases.

Sanitation standards in the host nation also reflected environmental concern. Recommendations were made where necessary to clear up different areas of operations due to trash and other materials that presented health hazards to U.S. Forces.

Insects (mosquitoes, flies, sand flies, and spiders) and rodents (mice and rats) presented other problems while in the desert. While water needed for mosquito production was lacking in some areas, other areas had a great mosquito population due to pools of stagnant water. Coastal estuaries provided a natural habitat for mosquitoes. The 155th PM Detachment treated standing water and sprayed for adult mosquitoes. Trash was removed to prevent attracting rodents and snakes. Host nation personnel were trained on standards to maintain proper sanitary conditions.

The TAML collected DNBI data on U.S. Forces participating in Bright Star. The DNBI reporting requirement was in the Operations Order but coordination with various medical treatment facilities was still

required to insure the reports were sent to the correct location and received on time. As many as 10 different locations reported the number of sick call visits for each of 14 different illness categories such as respiratory problems, gastrointestinal problems, injuries, dermatological conditions, etc. The rate of illness for each category was calculated using the size of the units and analyzed for trends or unusually high numbers. Categories with a higher-than-expected illness rate were investigated to determine if an intervention was possible to decrease the rate. For example, during the exercise an increase was noted in the rate for gastrointestinal illness. The increase was due to a large number of service members eating at unapproved restaurants during Morale, Welfare, and Recreation (MWR) trips to the Pyramids and the Cairo Museum. This finding was forwarded through command channels with the recommendation to increase emphasis on eating Meals, ready to eat (MREs) for lunch during the MWR trips and to avoid the local food establishments. The recommendation was followed and the rate of gastrointestinal illness declined.

Bryant said, "Through the eyes of a TAML soldier, Bright Star 99/00 was an excellent mission. We had the opportunity to use our skills and equipment in a different environment than we are accustomed to. We also had the chance to work with other Army and Navy PM units, as well as other nations. This being my first major mission, I experienced the reality of protecting soldiers from avoidable harm."

Fogg said, "One of the best things to come out of the exercise was to be able to see the fruits of our labor, i.e. the recommendations given to commanders were recognized and implemented as important for the safety and health of the forces in theater. We received accolades from commanders in U.S. Central Command, and 3rd Medical Command. Another aspect was the opportunity to work with the Allied Forces. We shared information, labor, equipment, experiences, and comradery. Items that they needed we could often supply and vice versa. It was an excellent opportunity to see how PM was conducted by Allied countries and was an experience I shall never forget."

Host Nation sanitation waste disposal (Cairo)

USACHPPM PERSONNEL

BAUER IS INDUCTED INTO ORDER OF MILITARY MEDICAL MERIT

Mr. John Bauer, Program Manager, Ground Water and Solid Waste, was inducted into the Order of Military Medical Merit.

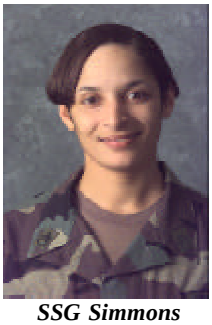
In 1978, The Order was established to recognize distinguished service of a prolonged duration in significant responsibilities, which indicate that the recipients are in the top 10 percent of their career field.

Mr. Steve Kistner, Deputy for Technical Services, recommended Bauer for membership. Kistner recognized Bauer for his technical expertise, outstanding performance, and dedication during his 27 years of active Federal service. Bauer has served with distinction in capacities ranging from a project officer, supervisory Branch Chief, Program Manager and as acting Director, Environmental Health Engineering. He has participated in many missions which include: the controversy surrounding the alleged contamination of the Cape Cod Sole Source Aquifer; the planning, direction and execution of the Army National Guards Installation Restoration Program; his assistance on the design and implementation of the Environmental Compliance Assessment System; and participation on numerous special environmental committees and task forces at the highest level of the Army and government.

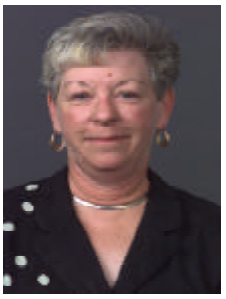
Bauer's academic and professional credentials are exceptional. He has been recognized for his professional contribution by receiving many awards such as the Secretary of the Army Decoration for Exceptional Civilian Service, the Joseph Lovell Award for Professional Excellence, and the U.S. Army Health Services Command Commander's Award for Civilian Service.

QUALITY ADVOCATE OF THE YEAR

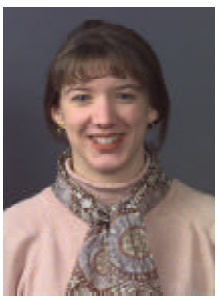
Dr. Robert Ryczak



SSG Simmons



Ms. Rosemary Gaffney



Ms. Michelle Canham -Chervak

During the Annual USACHPPM Ball the winners of the 1999 Quality Advocate of the Year were announced. There was a tie for first place with two runners up. This annual award is given to the individual who has had the greatest impact on improving the quality of our processes, products, or services. The winners were Dr. Robert Ryczak and SSG Elizabeth Simmons.

Dr. Ryczak was honored for his significant contributions and exceptional service as the Research Director, Henry M. Jackson Foundation and Interim Chief, Plans and Integration Office. He was recognized for his ability to connect and productively interact with people at all levels, both inside and outside of the USACHPPM.

SSG Simmons was acknowledged for her exemplary discipline and strong leadership that helped to streamline the installation of a Command security system resulting in cost savings. She ensured a smooth transition of responsibility of the Staff Duty Officer from the Deputy Chief of Staff for Operations to the Adjutant and completely overhauled the Staff Duty Officers' Standing Operating Procedures.

Ms. Rosemary Gaffney and Ms. Michelle Canham-Chervak were the other nominees being honored. As the Quality Compliance Manager for the Directorate of Laboratory Sciences, Ms. Gaffney has been the driving force to unify quality procedures. Her skill and knowledge of quality systems and best practices coupled with effective communications have vested her with the credibility and influence needed to accomplish significant quality improvements in laboratory operations.

As an epidemiologist in the Directorate of Epidemiology and Disease Surveillance, Ms. Canham-Chervak served as the Associate Editor of the Atlas of Injuries in the U.S. Armed Forces. She is an active member of the Marketing Quality Management Board and superbly facilitated numerous workgroups and board meetings.

The winners received an award plaque; the nominees received a quality paperweight. Congratulations to all the nominees of this prestigious award. They are all winners who have contributed to making the USACHPPM a world-class organization.

Army Clinical Occupational Environmental Medicine Force Health Protection at its Finest Potential Heavy Metal Exposure

Heavy metals have long been a source of disease in man. Ramazzini, the father of occupational medicine, noted the toxic effects of lead in the lead miners as early as 1650 AD. Numerous toxicities have surfaced since that time, such as Mad Hatters Disease in hat makers of Britain in the 1800s. The mad hatters were exposed to mercurials in dying their hats. Minimata Disease, from methyl-mercury-contaminated fish that surfaced during this century, stemmed from mercury contamination of Minimata Bay. Itai-Itai, or ouch-ouch disease, in Japan is attributed to cadmium toxicity. Lead is a well known occupational and childhood danger in the U.S. to this day.

This article presents a unique potential exposure to a large group of soldiers from 1990 to 1999. The potential exposures consisted of cadmium, chromium, and lead in dusts from previous plating and metal grinding operations. (unpublished documents).

Building 4109 of the Husterhoeh Kaserne in Pirmasens, Germany was used as a heavy metal plating and grinding facility from the late 1940s, when it was constructed, until the operation was closed in 1989. Toxic heavy metals, including cadmium, chromium, and lead, were used in electroplating. Other portions of the facility were used as a shop area where metal rods were ground down to expose heavy metals such as cadmium and chromium.

This building was closed as an industrial facility and the electroplating room was slated for demolition. Funds for demolition, however, became scarce, and the facility was not demolished. Subsequently, members of the U. S. Army Medical Material Command Europe and a medical logistics battalion reoccupied the facility. These units used the facility from 1989 until the building was closed in early 1999. Over this period, it is estimated that nearly one thousand troops from both the active and reserve components used the building. The facility was used for medical logistics operations, classrooms, physical training during inclement and cold weather, and for preparing supplies for umanitarian relief efforts.

In mid summer 1998, industrial hygiene at USACHPPM-Europe was alerted and became concerned about an old plating area in the building. This area was immediately secured to deny access and dust samples from the facility were obtained for analysis. The sample results identified very high values of lead, chromium, and cadmium. The occupational medicine physician at USACHPPM-Europe (COL Robert Gum) then obtained screening samples from selected members of the unit. When these screening values returned elevated, a full-blown investigation was mounted, and all members of the unit were tested for heavy metal exposure. The building was ordered closed and sealed by the Chief of Staff of U.S. Army Europe in April 1999.

Interior of Building 4019, Pirmasens, when used as an industrial facility (left photo: plating area; right photo: shop grinding area)

This action resulted in the Commander, U.S. Army Europe committing to finding all soldiers who had been potentially exposed to these metals in the building. This effort was began by USACHPPM-Europe, COL Robert Gum, and transferred to the Director, Clinical Preventive Medicine, USACHPPM-Main, LTC Paul Smith. Doctors Gum and Smith worked diligently to find all the potentially exposed soldiers. To date, approximately 500 soldiers have been evaluated.

Soldiers recently exposed in Europe received heavy metal screens as well as urine beta-2-microglobulins to assess potential problems cadmium may have caused to the kidneys. Additionally, serial zinc protoporphyins (ZPP) were obtained on these troops. Troops over 4 to 5 months post potential exposure are under evaluation. These soldiers will be evaluated with targeted physical examinations with special concentration on the neurological and the renal systems. Suggested laboratories in these individuals are limited to a urine beta-2-microglobulin, since all other laboratory tests would have returned to normal range by the time of their examination.

Laboratories in the more recently potentially exposed group showed no abnormal levels of these heavy metals in blood specimens. However, a large number initially had abnormal ZPP, and a few had abnormal beta-2-microglobulins. On follow up, all these laboratory values have declined or returned to normal.

The Occupational Environmental Medicine Program (OEMP) is contacting soldiers who have been separated from service. These soldiers have been designated for evaluation for this potential exposure by the Secretary of the Army. The OEMP Occupational Health Nurse Specialists are heading this effort. Additionally, the OEMP team will be guiding the effort to find and evaluate reserve personnel who were stationed at Pirmasens, Germany. Pertinent information on all those potentially exposed will be stored in a special database at the USACHPPM.

It is reassuring that virtually no physical abnormalities have been noted to date, and laboratories that were initially elevated have returned to normal. Additionally, a risk assessment of the dust samples done by OEMP experts shows that the risk to these soldiers was indeed quite low. The OEMP team consists of: LTC Paul Smith, D.O., M.P.H; COL Robert Gum, D.O., M.P.H; Dr. Coleen Weese, M.D., M.P.H; Ms. Laveda Durbin, R.N., COHN-S; and Mr. Thomas Smith, R.N., COHN-S. POC: LTC Paul Smith, DSN 584-4312, 410-436-4312, or 1-800-222-9698.

Exterior of Building 4109, Pirmasens

ARMY EYE INJURIES

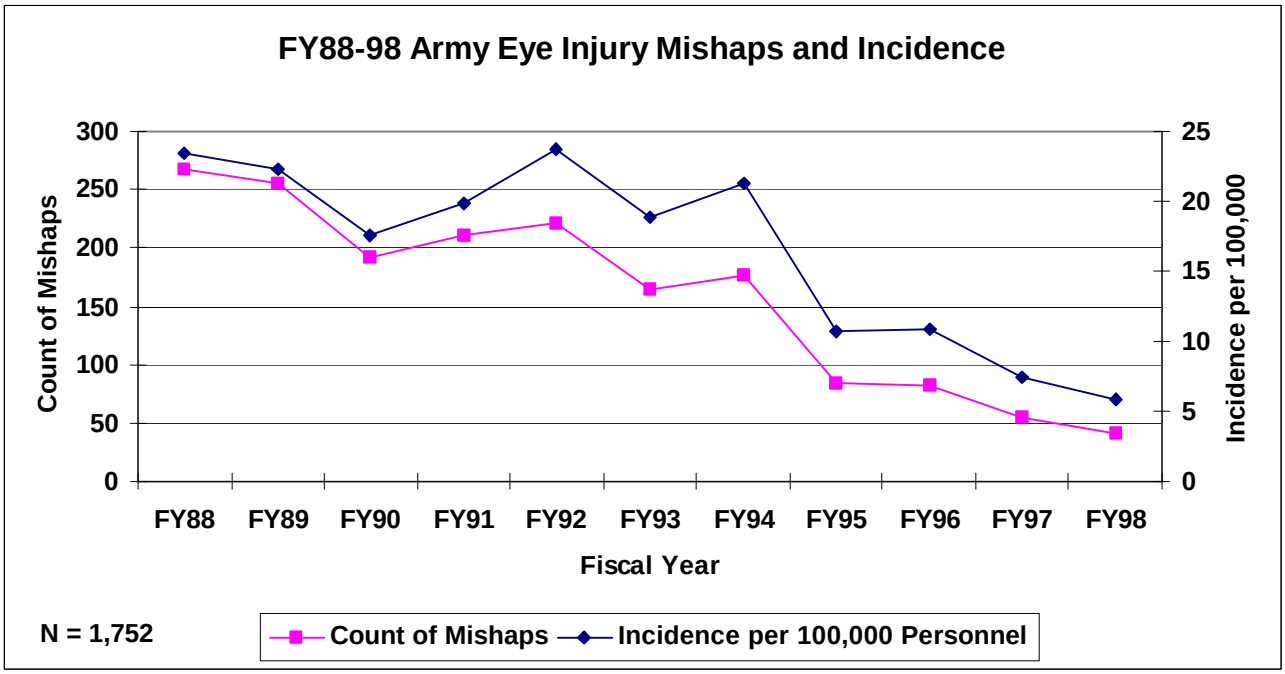
Even though the eye comprises only a small part of the surface area of the human body, it is injured quite frequently[1]. The 1994 Safety and Health Statistics of the Bureau of Labor and Statistics reveals a total of 83,549 eye injuries with a rate of 10.4 per 10,000 full-time workers. Of these 83,549 eye injuries, 58,519 were from contact with an object and/or equipment and 22,215 were from exposure to harmful substances or environments.[2] These injuries have a significant impact on the civilian workforce.

Military personnel are not immune to costly occupational eye injuries either. A study of eye injuries in the 8th Infantry Division in Germany found 13.9 man-years annually were lost to occupational eye injuries at a cost of $404,800.[3] A study at Fort Campbell estimated that there were 2,652 eye injuries per year with 89,107 man-hours lost at a cost of $454,446 per year.[4] Prevention of these costly eye injuries should be paramount by virtue of 90 percent of eye injuries being preventable.[5]

The Tri-Service Vision Conservation and Readiness Program Office performed a retrospective study of ground mishap eye injuries compiled by the U.S. Army Safety Center (USASC), Fort Rucker, Alabama, from Fiscal Year (FY) 1988 through 1998. This analysis included only class A, B, and C mishaps because class D mishaps are not reported to the USASC. Demographic data analyzed included gender, age, rank, and status (military or civilian). Injury data analyzed included type of activity when injured, place of injury, severity of injury, cause of injury, type of safety equipment, if safety equipment was used, injury cost, work days lost due to injury, and days hospitalized due to injury.

From FY88-98, Army safety offices reported 65,944 injuries with 1,752 (2.67%) being eye injuries. The number and incidence of eye injuries per year has been on a downward trend since FY88 (Chart 1).

Chart 1



Of those injured, 1,646 (93.9%) were males and 105 (6.0%) were females with 1 (0.1%) being unknown. The mean age of people injured was 28.5 years with a standard deviation of 14.1 years. The mode and median for age are 21 and 24 respectively. Table 1 reveals the age distribution with most injuries occurring to those who are 20-29 years old. Subdividing this group even further, 732 accidents occurred to people 20-24 and 380 to individuals 25-29.

Table 1

Distribution	
Age	Count
Under 20	144
20-29	1112
30-39	326
40-49	78
50-59	31
Over 59	4

N= 1695, Mean = 28.5 with Std Dev = 14.1, Mode = 21, Median 24.

Of those 1,752 individuals injured, 1,609 were military personnel and143 were civil service employees. For the military personnel, an E-4 had a higher percentage of injuries followed by E-3 and E-5. Table 2 lists the rank distribution for military personnel.

Table 2

Military Rank Distribution		
Rank	Count	Percent
E1	75	4.7%
E2	117	7.3%
E3	282	17.5%
E4	546	33.9%
E5	265	16.5%
E6	143	8.9%
E7 - E9	77	4.8%
W1 - W4	29	1.8%
01 - 06	69	4.3%
USMA/ROTC	3	0.2%
Unknown	3	0.2%
N=1609		

Over 50% of eye injuries occurred while individuals were performing maintenance, repair, or servicing; participating in sports; or performing combat soldiering. Table 3 reveals the activity the person was undertaking while injured.

Table 3

Activity Code Distribution		
ACTIVITY CODE	COUNT	PERCENT
MAINTENANCE/REPAIR/SERVICE	495	28.3%
SPORTS	200	11.4%
COMBAT SOLDIERING	184	10.5%
WEAPONS FIRING	143	8.2%
OPERATING VEHICLE OR VESSEL	138	7.9%
HUMAN MOVEMENT	103	5.9%
HANDLING MATERIEL/PASSENGER	77	4.4%
PASSENGER	73	4.2%
SOLDIERING	65	3.7%
FOOD/DRINK PREPARATIONS	47	2.7%
SUPERVISORY	30	1.7%
BYSTANDING/SPECTATING	30	1.7%
JANITORIAL/HOUSEKEEPING/GR	29	1.7%
PERSONAL HYGIENE/FOOD/DRINK	29	1.7%
ENGINEERING OR CONSTRUCTION	20	1.1%
OTHER	89	5.1%
N=1752		

What is wrong in this picture?

The cause of injury was documented in 1,714 injuries. Table 4 reveals more than half of the mishaps are caused by being struck by an object.

Only 206 of the 1752 injuries reported whether or not eye protection was worn. Eye protection was worn in 64 (31%) of the time while 142 (69%) personnel did not wear eye protection.

For FY 88-98, there were 6 (0.3%) Class A injuries with 3 fatalities and 3 total permanent disabilities. The individuals with the total permanent disabilities lost vision in both eyes. There were 82 (4.7%) Class B mishaps where the individuals lost vision in one eye. Finally, Class C mishaps, lost workday cases, accounted for 1664 (95%) of the reported eye injuries.

Table 4

Cause of Injury Distribution		
Cause of Injury	Count	Percent
STRUCK BY	957	55.8%
EXTERNAL CONTACT	247	14.4%
STRUCK AGAINST	201	11.7%
EXPOSURE	161	9.4%
RUBBED/ABRADED	53	3.1%
FELL FROM ELEVATION	28	1.6%
UNKNOWN	22	1.3%
FELL FROM SAME LEVEL	13	0.8%
OTHER	32	1.9%
N=1714		

The estimated total cost of eye injuries was $16,425,816 with a mean of $9,375 and a standard deviation of $30,120. The total number of lost workdays was 10,587 with a mean of 6.04 days and a standard deviation of 10.87 days. Of the injuries reported to USASC, 542 (31%) were hospitalized. The total number of days hospitalized for these mishaps was 3,355 days with a mean of 1.91 days and a standard deviation of 5.55 days.

Using this information, a profile can be established of the average Army person who experiences a major eye injury. This person would be an E3-E5 who is a 20-24 year old male. This individual is struck by an object while performing combat soldiering, participating in sports, or performing maintenance, repair, or servicing.

Local vision conservation and readiness programs can use this profile to target education and training material to those individuals who are more likely to be injured. Since 90% of all eye injuries are preventable, training personnel, who fit this profile, and their supervisors on vision safety, wear of eye safety devices, and prevention of eye injuries can significantly reduce the incidence and cost of eye injuries in the Army.

References:

[1] Brown TE, Bellamy RF, eds. Emergency War Surgery. Washington DC: US Government Printing Office; 1988.
[2] US Department of Labor, Occupational Safety and Health Administration, Bureau of Labor and Statistics. Safety and Health Statistics 1994. Washington, DC.
[3] Ward DL, Gorie C: Occupational Eye Injuries in Soldiers. Journal of Occupational Medicine/May 1991, volume 33 No. 5, 646-650
[4] Lott RJ: Occupational Health for the Soldier. Medical Bulletin of the US Army Medical Department, February 1988, 28-30.
[5] Prevent blindness America

POC: Tri-Service Vision Conservation and Readiness Office, DSN 584-2714, 410-436-2714, or 1-800-222-9698.

AIR POLLUTION PREVENTION (P2) IT HAS WORKED FOR OTHERS - IT WOULD WORK FOR YOU

The USACHPPM has teamed up with the Air Quality Branch of the Air Force Materiel Command's Institute for Environment, Safety, and Occupational Health Risk Analysis (IERA) to promote air P2 at Army installations. The IERA has been performing audits for Air Force installations and has reduced emissions by as much as 50 percent. In some cases, installations went from major to minor source status. The approach is multifaceted including an emission inventory review and a process-by-process evaluation. The process evaluations result in recommended products (to include serial numbers, brand names and requisition information), work practice changes, and equipment modifications that reduce emissions but still get the job done. The IERA has extensive experience with P2 products and performance specifications. This, when combined with the USACHPPM Air Programs' knowledge of Army facility air quality management, fits well within the missions of both organizations and should provide a benefit for interested installations worldwide.

Some installations may not be aware of an air quality management assistance document, "Air Quality Management Using Pollution Prevention: A Joint Service Approach." This document provides P2 solutions to air quality needs and provides cross references of air P2 equipment to type of process (e.g. solvent degreasing) and to regulations (e.g. Aerospace NESHAP). This document can be found on the Defense Environmental Information Exchange (DENIX) at:
http://www.denix.osd.mil/denix/DOD/Library/Air/Airmgt/aqtoc.html
POC: Dr. Dave Reed, DSN 584-3500, 410-436-3500, or 1-800-222-9698.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW

The USACHPPM has created an informational video aimed at increasing awareness of the Emergency Planning and Community Right-to-Know Act. Brief and informative, this free video is formatted to capture the attention of shop personnel and can be viewed in 10 minutes. It covers the basic provisions and reporting requirements of the Executive Order that apply to all Federal facilities. POC: Ms. Denean Summers, DSN 584-3500, 410-436-3500, or 1-800-222-9698.

HANDBOOK OF PEDIATRIC ENVIRONMENTAL HEALTH

Pediatricians have long trusted the Red Book as the definitive resource for control of infectious diseases in children. Now, the American Academy of Pediatrics (AAP) has made available to all its members the Green Book: *Handbook of Pediatric Environmental Health*. The AAP acknowledges that "Wherever kids live or play, they may be at risk. An amazing variety of environmental hazards can affect their health." Children eat, drink, and breathe three times more than adults on a weight basis as well as being more involved with the environment around them. The Green Book was developed as a comprehensive tool to help identify, reduce, and eliminate potential environmental hazards. It contains accurate and relevant information about the impact of the environment on children's health. Topics covered include:

Asbestos
Asthma
Carbon monoxide
Tobacco
Lead
Electric/magnetic fields
Mercury
Nitrates
Food contaminants
Pesticides
Cancer
Air pollutants
Noise pollution
Ionizing radiation
Ultraviolet light
Water pollution
Multiple chemical sensitivities

POC: Dr. David A. Reed, DSN 584-3500, 410-436-3500, or 1-800-222-9698.

ENVIRONMENTAL NOISE

The Environmental Noise Program and Acoustics Team, U.S. Army Construction Engineering Research Laboratory (CERL), won funding from the DOD Environmental Security Technology Certification Program (ESTCP). Teaming up with CERL, the Environmental Noise Program developed an ESTCP proposal for "Assessing and Controlling Blast Noise Emission." The project is to demonstrate and validate two of the models used by the DOD to assess and control military training noise. This proposal competed against approximately 200 projects submitted by various DOD and non-DOD organizations. Only12 finalists were invited to brief their proposals in October, with the winning five proposals notified earlier in the year. The Environmental Noise Program and CERL will collaborate on this project and share ESTCP funding of $225,000 each year through 2002. POC: Mr. William Russell, DSN 584-3829, 410-436-3829, or 1-800-222-9698.

RECYCLED CONTENT PRODUCTS

The Ground Water and Solid Waste Program offers training for Army installation personnel who purchase items using Federal funds. The training, which focuses on buying recycled content products, is in response to Executive Order (EO) 13101, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition. The EO requires Federal purchasers to identify and target products made with recycled content in lieu of those made with virgin materials, a policy called affirmative procurement. The U.S. Environmental Protection Agency (EPA) publishes Comprehensive Procurement Guidelines, which identify certain products to be considered and purchased. The EO calls for consideration of other factors in the buying process, such as packaging, hazardous content, product reusability, or ability to be recycled.

The implications of the EO are far reaching. An Army installation may have hundreds of personnel making purchases every day, many with credit cards. The seminar gathers these purchasers, including personnel from procurement, contracting, logistics, and environmental offices, and provides information on purchasing recycled content products and other environmentally preferable products.

Seminar topics include:

- ❖ Background on Affirmative Procurement, and Why It Makes Sense
- ❖ EPA's Comprehensive Procurement Guidelines
- ❖ EPA Compliance Inspections – What They Will Look For
- ❖ Balancing the Costs and Benefits
- ❖ Federal Acquisition Regulations
- ❖ Writing Contracts to Include Affirmative Procurement
- ❖ Where To Find Environmentally Preferable Products

The seminars will be offered beginning February 2000, and will be conducted at the installation to encourage maximum attendance. POC: Ms. Pat Rippey, DSN 584-5201, 410-436-5201, or 1-800-222-9698.

HEALTHY PEOPLE 2010 LAUNCHED

On 25 January 2000, Donna Shalala, the Secretary of the U.S. Department of Health and Human Services, and Dr. David Satcher, the U.S. Surgeon General, launched Healthy People 2010. This bold initiative is a comprehensive health promotion and disease prevention agenda for our Nation.

Healthy People 2010 sets health improvement objectives with targets that will be monitored over the first decade of the 21st century. It builds upon 20 years of national health initiatives that began in 1979 with publication of The Surgeon General's Report, *Healthy People*. That landmark report assertively stated, " let us make no mistake about the significance of this document, it represents an emerging consensus among scientists and the health community that the Nation's health strategy must be dramatically recast to emphasize the prevention of disease." *Healthy People* established the concept that setting national health goals and systematically monitoring progress toward those goals could motivate action and lead to their accomplishment. It targeted reduction of premature death in the five life stages: infancy, childhood, adolescence, adulthood, and older age.

By 1990, the value and power of established health goals for the Nation were well recognized. The Department of Health and Human Services released *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, a comprehensive agenda with 22 priority areas and 319 supporting objectives. The entire national public health community, along with more than 10,000 individuals and organizations, participated in the development of *Healthy People 2000*. The process included regional hearings to ensure that the agenda reflected the diverse population of our Nation. A coalition known as the Healthy People Consortium, an alliance of national organizations that support and are involved in the Healthy People process, was developed along with Healthy People 2000 to provide the human resources to champion and support the ambitious agenda. The original consortium began with 157 organizations and has now grown to more than 600 government, professional and community organizations, businesses, churches, and agencies. The complete listing of consortium members is available on the *Healthy People* website address provided at the end of this article. Individual citizens are also highly encouraged to participate in the process.

The *Healthy People 2010* framework has two over-arching goals – to "Increase Years of Healthy Life" and to "Eliminate Health Disparities". Four enabling goals support them, focusing on promoting healthy behaviors, protecting health, getting access to quality health care, and strengthening community prevention. Healthy People 2010 objectives are grouped into 28 areas that range from physical activity and nutrition, to chronic diseases, medical product safety, and public health infrastructure. The majority of the objectives target lifestyle and other risk factors that can prevent disease and injury such as reducing tobacco use, increasing physical activity,

improving nutrition, increasing seat belt use, and reducing risky sexual behaviors.

Healthy People 2010 also focuses on issues such as environmental conditions (exposure to carcinogens at work), health risk screening, immunizations, and access to quality health services.

Nearly all states, the District of Columbia, U.S. territories, and many large corporations have developed their own *Healthy People* plans. Most of the plans are built around the national objectives, but virtually all have been tailored to meet their specific needs. In addition, Congress has specified Healthy People objectives as the tool for assessing the progress of numerous health programs that are funded by the Federal government either directly or through block grants. The objectives are also used in performance measurement by organizations such as the National Committee on Quality Assurance (NCQA) for its Health Plan Employer Data and Information Set (HEDIS) 3.0. The HEDIS is a set of standardized measures for health care purchasers and consumers to use in assessing performance of managed care organizations in the areas of immunizations, mammography screening, and other clinical preventive services.

The health-related factors and behaviors that the national objectives monitor are also important to Department of Defense (DOD) Force Health Protection efforts and initiatives. Some reasons for this are identified in the Executive Summary of the 1998 DOD Survey of Health Related Behaviors Among Military Personnel:

1. Poor health practices among service members negatively impact military readiness.

2. The health behaviors and habits that service members acquire or maintain while in the military can either set the stage for or reduce the risk of developing chronic diseases.

3. Compared to civilians, military personnel consistently show higher rates of some negative health behaviors, such as heavy drinking, which indicates that service members may be at increased risk for certain diseases.

During the 1990s, DOD placed increased emphasis on health promotion initiatives and in 1995 began monitoring progress toward selected Healthy People 2000 objectives. Examples of objectives measured by the 1998 DOD survey include:

- Approximately 42 percent of sexually active unmarried personnel in the total DOD used a condom the last time they had intercourse. The total DOD rate and rates for individual Services were all lower than the *Healthy People 2000* target of 50 percent.

- More than two-thirds of DOD personnel (67.7 percent) reported that they had engaged in one or more types of strenuous exercise at least 3 days per week for at least 20 minutes per occasion in the past 30 days. This significantly exceeds the *Healthy People 2000* objective of 20 percent, as well as the 1995 data for the U.S. adult population, which was 23 percent. While this statistic reflects positively upon military

personnel compared to the general adult population, it highlights the impact of the military's physical fitness standards and reveals just how sedentary American adults have become.

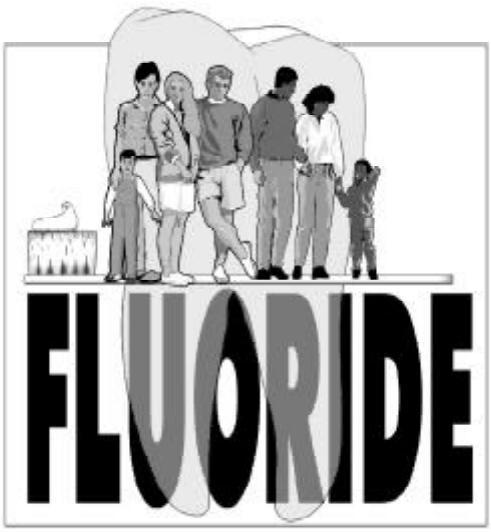
We can all participate in the *Healthy People 2010* initiative. As individuals, we can take responsibility for improving our own health and encourage friends and family members to do so as well. As business and community leaders, we can support initiatives designed to improve the health of our organizations and communities. *Healthy People 2010* is a call to action. Take charge and answer the call!

For more information, visit the Healthy People 2010 website at: http://www.health.gov/healthypeople

The *1998 DOD Survey of Health Related Behaviors of Military Personnel* is posted at: http://www.tricare.osd.mil/analysis/surveys/98survey/survey.html

POC: LTC Joan M.G. Lyon, MS, RD, LD, DSN 584-8856, 410-436-8856, or 1-800-222-9698.

THE BENEFITS OF FLUORIDE LAST A LIFETIME



Community water fluoridation began in the United States over 50 years ago, and has caused a dramatic decline in dental caries and improvement in oral health. For over four decades, the American Dental Association (ADA) has endorsed community water fluoridation as a safe and effective means of preventing tooth decay. Thousands of studies have investigated the safety and efficacy of fluoride, and all scientifically sound studies of water fluoridation validate the safety and efficacy of recommended, optimal concentrations of fluoride. It is important to note that receiving continual low doses of fluoride not only benefits children, but adults as well.

The effect of fluoride occurs in two ways – systemic and topical. The systemic or internal effect occurs when teeth are developing, even before they appear. Enamel, the outer layer of the tooth, is made stronger by fluoride within the body, resulting in teeth that are stronger and more resistant to acid attacks. Acid attacks occur when the normal bacteria in the mouth break down dietary sugars and carbohydrates.

On the other hand, topical fluoride acts externally by accumulating in dental plaque and in saliva. Topical fluoride slows the process of losing enamel during acid attacks. Furthermore, topical fluoride facilitates the process of remineralization, or rebuilding of tooth structure. Remineralization reverses the early decay process. Of the two mechanisms, fluoride acts predominately through its topical effect. Thus, fluoride delivery mechanisms that make fluoride available topically on a continual basis are the best means for achieving the maximal protective benefits of fluoride.

There are multiple forms of fluoride delivery: community water fluoridation, toothpastes (dentifrices), mouthwash, supplements, and professionally applied gels. Each method of delivery has advantages and disadvantages.

Water fluoridation offers the most advantages, exerts its effect topically, and benefits **all** who drink it regardless of age. (Please note that community water fluoridation is never a substitute for the daily practice of good oral hygiene). Water fluoridation is also cost effective. On average, it costs 51 cents a year per person to fluoridate drinking water supplies. According to the American

Academy of Pediatric Dentistry, community water fluoridation is the safest and most cost-effective way to prevent tooth decay.

Toothpaste is an important and common source of fluoride. The fluoride in toothpaste works by decreasing bacterial plaque and promoting remineralization. Fluoride supplements (fluoride prescriptions) exert their effect systemically and are recommended for children between 6 months and 16 years of age who do **not** live in communities with fluoridated water. Non-compliance – not following the prescribed regimen – is a problem with supplements. Optimal levels of systemic fluoride can only be achieved by following your dentist's instructions.

Presently, we have the preventive technology and methods to eliminate dental decay. Individuals throughout their life as well as entire populations can be caries free with the appropriate use of fluorides, dental sealants, and good oral hygiene. It is important for the dental profession to ensure that everyone – particularly those at greatest risk – is educated about how to prevent this common disease. Water fluoridation is the most efficient and effective way to achieve optimal oral health and reduce dental caries. To achieve the maximal protective benefits of fluoride, it is recommended that all DOD military water supplies be fluoridated and that water fluoridation be continuous and uninterrupted. Therefore, Army community water supplies, including field water supplies, should be fluoridated. For more information on this topic, visit the ADA website at: http://www.ada.org/ or ask your dentist. POC: MAJ Mark Piotrowski, DSN 584-7390, 410-436-7390, or 1-800-222-9698.

YOUNG PEOPLE –ADVOCATES FOR HIV PREVENTION

Young people, as the future of our world, must commit themselves to reducing the spread of HIV/AIDS. Research by the Centers for Disease Control and Prevention (CDCP) indicates that young people engage in behaviors that increase their risk of becoming infected with HIV. The CDCP reported that from July 1998 to June 1999, individuals from the age of 13 through 24 years represented 17.5 percent of all HIV infections, most of which were sexually transmitted. Females in this age group represented 24.3 percent of the total female population infected with HIV. Of the total male population with HIV, 14.9 percent are ages 13 through 24. During this same time period, 4 percent of the total number of AIDS cases occurred in this age group.

The American Association for World Health and the World Health Organization have challenged young people to take a central role in fighting the AIDS epidemic. Young people are encouraged to be a force for change by getting involved in reducing the spread of HIV as well as to have com-

passion and support for those affected. There are many ways that a young person can be an advocate for AIDS prevention.

Taking action to stay healthy by reducing personal risk-taking behaviors and by educating peers is part of the effort. The first step for young people to reduce their personal risk is knowing how HIV is spread: a person can become infected with HIV by having unprotected sexual intercourse (vaginal, oral, or anal) with an infected person or by sharing needles or syringes with an infected person. The second step is practicing what they know or abstaining from behaviors that transmit HIV.

Youth generally can get information about HIV/AIDS from parents, schools, family doctor, religious groups, and local health departments. In addition, there are toll-free hot lines specifically for young people. For example, the Teen AIDS Hotline, 1-800-440-TEEN is staffed on weekends from 6:00 p.m. to midnight by trained students. A young person can advocate for HIV/AIDS education and awareness by being an HIV/AIDS teen peer educator with the American Red Cross, 703-206-7180.

Other activities that youth can become involved with are commemoration activities for World AIDS Day in school. Students can sponsor AIDS awareness activities such as inviting a young adult living with HIV/AIDS as a speaker, having a poster contest, decorating bulletin boards, designing fact sheets, or wearing red ribbons. Volunteering with a local AIDS service organization can provide young people with a multitude of opportunities to learn compassion and experience the effects this disease has on a personal and community level. The National AIDS Information Hotline, 1-800-342-AIDS, has a variety of educational and agency resources for AIDS education and support services.

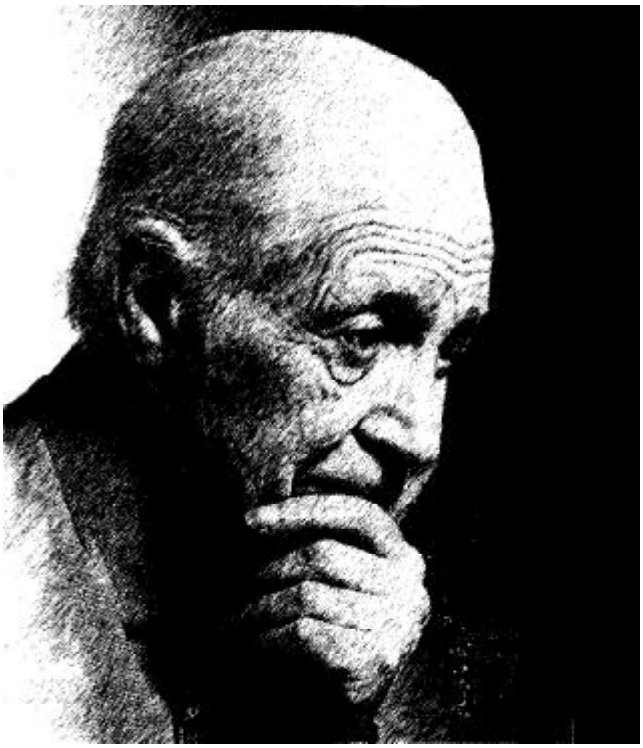
Though the challenge for a change is to the young, the efforts of the younger generation need the support of adults. Adults can actively participate by mentoring, teaching, or developing policies to protect the rights of youth to be educated about HIV/AIDS or to protect those living with HIV from discrimination or exploitation. Parents must talk with their children and assist them with developing decision-making skills regarding peer pressure. Adults can also advocate for and support HIV/AIDS education programs and services for the youth in their own communities. Parents and other concerned adults can work with state and local health departments to organize HIV educational presentations, training programs, or town hall meetings. Health care providers who work with youth can enhance their education and counseling skills by taking the HIV Prevention Counseling Course, which is offered by the CDCP. The CDCP administers these programs state by state. For more information, contact the National AIDS Clearinghouse at 1-800-458-5231.

Community and national organizations can also support the efforts of youth's commitment to reduce the spread of HIV/AIDS. Taking action to improve access to HIV medical care and support for young adults is one avenue in which adults can

facilitate change through collaboration with organizations such as the National Association of People with AIDS, 202-898-0414. There are several other national organizations that provide HIV education and advocacy for youth: The American Red Cross has an HIV program targeting youth called ACT SMART, which can be accessed through your local chapter or through the organization headquarters at 703-206-7180. The American Social Health Association, 919- 361-8400, provides educational and advocacy resources. Communities can also collaborate with media (television, radio or newspaper) to ensure that educational messages or programs about HIV get out to youth via public service announcements or airing of special programs.

To help ensure that future generations will be HIV-free, young people must become a force for change. Adults can augment this force by encouraging young people to commit themselves to reduce the spread of HIV/AIDS within their personal lives and within their communities. For more information contact the American Association for World Health at 202-466-5883. POC: Ms. BethAnn Cameron, DSN 584-7175, 410-436-7175, or 1-800-222-9698.

AN ALZHEIMER'S DISEASE REVIEW



Dementia

Dementia is the progressive decline in mental function leading to inability to perform activities of daily living. Many things cause dementia. Among them are alcohol abuse, depression, HIV/AIDS, tumors, Parkinson's disease, cerebral ischemias (stroke), polypharmacy (taking many drugs at once), infection, head injury, and Alzheimer's disease (AD). These types of dementia are <u>not</u> part of the normal aging process.

As the number of older Americans increases, so will the prevalence of dementia. When it occurs, care must be taken to evaluate all the possible causes, some of which are reversible, such as polypharmacy and depression. Unfortunately, most dementias, including Alzheimer's disease, are not reversible.

AD

Alzheimer's disease is the most common form of dementia, affecting about 4 million people in the U. S. Individuals in their 30s and 40s can develop AD, but it is most common in those over age 85, where the incidence is nearly 50 percent. The incidence is expected to more than triple by the middle of the 21st century if no advances are made in curing or preventing the disease.

Alzheimer's disease is the third most expensive disease in the U. S., costing $100 billion per year for research, treatment, and long-term care. The average lifetime cost per patient is $174,000. These figures do not include the toll taken on the health of family caregivers, who care for about 70 percent of people with AD.

The predisposing factors for AD are increasing age (although most older people do not get Alzheimer's), family history, and Down syndrome. The disease process is characterized by the formation of protein plaques in brain cells and tangles of abnormal nerve fiber fragments. While the cause of these abnormalities is still not known, some interesting associations, such as those between AD and free radicals (particles from cells damaged by oxidation) and with poor nutrition in childhood, are helping to guide further research.

In a breakthrough announced by Amgen on 22 October 1999, the enzyme that starts the protein plaque formation has been discovered. Scientists say, however, that it will be several years before a drug to treat or prevent AD will come out of this new information.

Symptoms and Care

The Alzheimer's Association lists 10 warning signs of AD:

1. Recent memory loss that affects job skills.
2. Difficulty performing familiar tasks.
3. Problems with language.
4. Disorientation to time and place.
5. Poor or decreased judgment.
6. Problems with abstract thinking.
7. Misplacing things.
8. Changes in mood or behavior.
9. Changes in personality.
10. Loss of initiative.

In contrast to some other forms of dementia, AD symptoms occur gradually, although the rate can be different from person to person. In other dementias, symptoms are more likely to begin suddenly or to come and go.

There are four stages of AD. Here is a very brief description of each. More detailed information can be found on the web site of the St. Louis Chapter of the Alzheimer's Association: http://www.alzstl.org/stages.html.

Stage 1 is **Forgetfulness**, in which short-term memory loss begins to affect job performance and the individual shows less energy and spontaneity. The person may forget which bills are paid or pay the same ones more than once and may have difficulty driving. Care involves simplifying routines and ensuring a safe environment.

Stage 2 is **Confusion**. Attention span shortens, and more assistance is needed with activities. The person may forget to bathe or become careless with money. Care should focus on structure, limiting choices, and frequent reminders.

Stage 3 is **Disorientation** and involves problems with logical thinking and finding the right words. Irritability and suspiciousness increase. Wandering can become a problem. Care giving needs to incorporate reassurance and communication through touch, as language comprehension decreases.

Stage 4 is **Dependency**, which is the most difficult for caregivers and frequently the longest in duration. The person cannot recognize him/herself or family members and friends. He or she cannot communicate and experiences increasing difficulty with eating and mobility. Care giving becomes full-time.

Early diagnosis of AD and other dementias is critical so that disorders with reversible causes can be treated and so that individuals with AD and their families have time to plan and prepare for impending and escalating care needs. Many resources are available to clinicians, patients, and families, including printed materials and support groups. Some of the best web sites are the St. Louis Chapter site mentioned above, the Canadian Alzheimer's Society site, http://www.alzheimer.ca/, the Wellness Web's section on AD, http://www.wellweb.com/INDEX/QALZHEIM.HTM#whatsnew, and the Agency for Health Care Policy and Research's Clinical Practice Guideline section, http://www.ahcpr.gov/clinic/alzcons.htm. POC: Ms. Judy Harris, DSN 584-7013, 410-436-7013, or 1-800-222-9698.

DOHS

DOD ERGONOMICS BEST PRACTICES 2000 CONFERENCE

25 April 2000
Uniformed Services University of the Health Sciences (USUHS) Auditorium
4301 Jones Bridge Road, Bethesda, Maryland 20814

The DOD Ergonomics Best Practices 2000 Conference, 0830 - 1630, will be open to all DOD and Federal Agencies free of charge. The target audience is safety and occupational health personnel. CEU/CME credits for the presentations are available. Posters and displays will be set up in the lobby area. There will be a general session and three breakout sessions. The topics listed below for each session are tentative and subject to change.

Program Development: Real Life Experiences

-Policy development
-Case examples/success stories
-Processes, strategies
-Trouble-shooting/pitfalls
-Panel session (AF, Navy, MC, Army, other departments)
-Cost-benefit models/analyses
-Medical Expense and Reporting System (MEPRS)

Applied Research: What Does It Mean to the Field?

-Back injury prediction study
-Injury/illness data analyses (DMSS/ICUC)
-AF reduction in ownership costs project
-Army unit ergonomics program demonstration project
-Hand tool replacement project
-NIOSH research activities

Putting Ergonomics into Practice: What, When, Where, and How

-DOD Ergonomics Working Group products
-Federal Agencies' products
-DOD Computer Accommodation Program (CAP)
-GSA Center for Information Technology Accommodation (CITA)
-Medical management (work-related musculoskeletal disorders and low back pain clinical practice guidelines)
-Defense Occupational Health Readiness System/Command Core Ergonomics Modules
-Activity based costing (technique)
-Web based training
-Worker education programs

Each attendee representing a separate department or installation will receive a tool kit (one per installation or agency) with samples of the products the DOD Ergonomics Working Group has produced.

For airline travel information, maps and written driving instructions go to the USUHS Transportation Information site: http://www.usuhs.mil/usuhs/location.html

You will be responsible for making your own hotel/travel arrangements. If you're not familiar with the area, the Bethesda Urban Partnership website is a good starting point for getting lodging and dining information: http://www.bethesda.org/about/default.htm

Additional information will be posted on the USACHPPM Training website (http://chppm-www.apgea.army.mil/trng/describe.crs/erg.htm) as it becomes available. To register, use the on-line registration form: http://chppm-www.apgea.army.mil/trng/forms/e8801.htm

SOLDIER EXPOSURE ASSESSMENT

In July 1999, 1LT Marshall and CPT Banchs, project officers with the Industrial Hygiene Field Services Program, and SPC Holcomb, a 91S, conducted a soldier exposure assessment survey at Fort Drum, NY. The purpose was to conduct exposure assessments of soldiers in armor, mechanized infantry and self-propelled field artillery units as they perform simulated battlefield tasks. All of the soldiers were members of the New York National Guard.

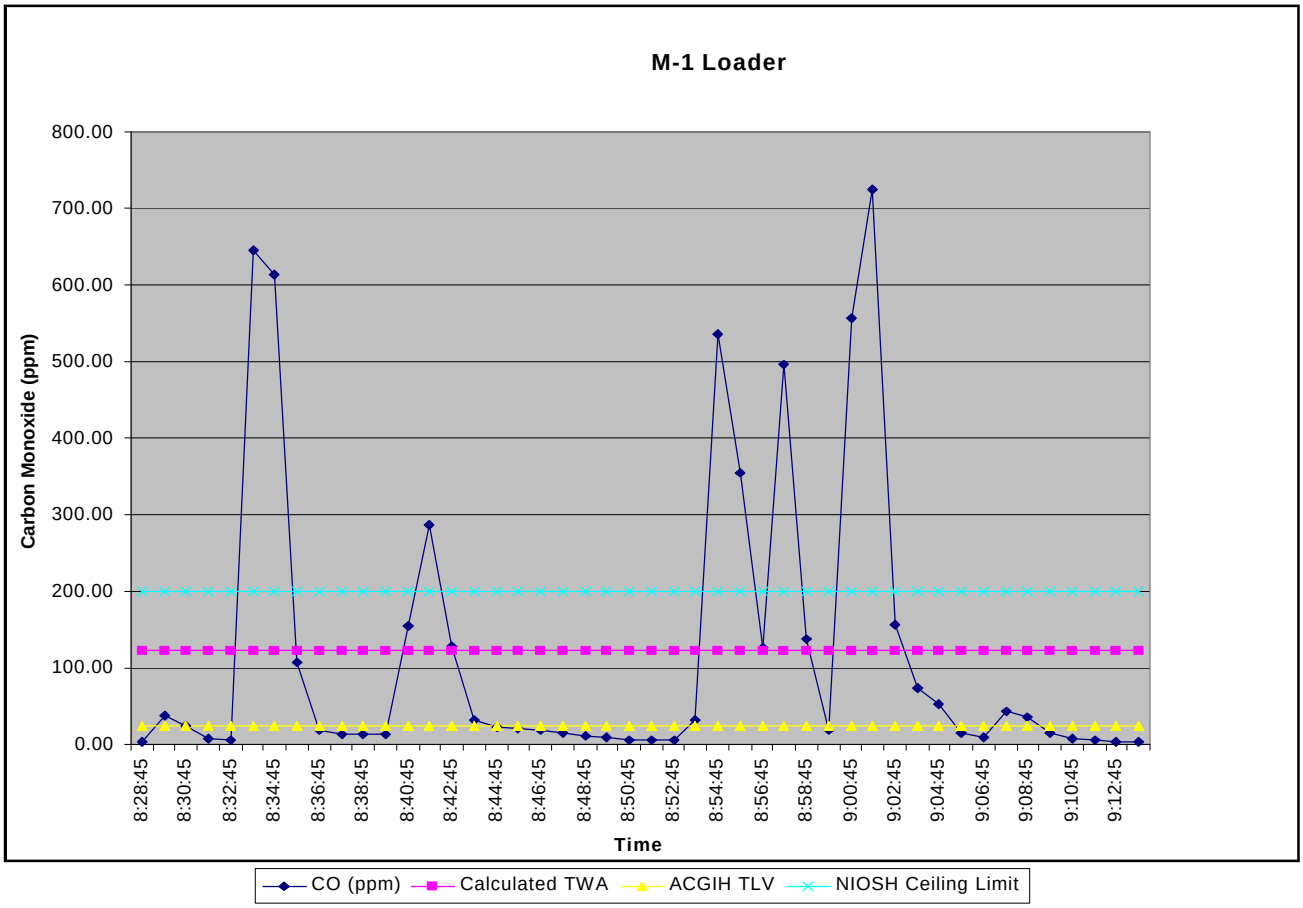
There is a growing interest in collecting soldier occupational exposure data in the field setting, because little data are available to characterize these potentially harmful exposures. Since there are no similar work practices in the civilian or garrison setting, it is difficult to model these exposures as they occur in a field or deployment scenario. Any exposure that is a result of work performed solely in the military is referred to as a military unique occupational exposure.

The scope of this survey was limited to evaluating several chemical substances. The substances chosen either represented the most serious hazards or they had the highest potential to exceed Army-adopted occupational exposure limits. The bulk of the chemical substances evaluated were explosive by-products typically released after firing a round down-range, and are referred to as bore gases.

Results from the sampling indicated that armor soldiers may be exposed to elevated levels of ammonia and carbon monoxide when firing the main gun of the M-1 Abrams Tank. The Figure depicts the amount of carbon monoxide that an M-1 Abrams loader is exposed to during the course of one firing practice scenario

(commonly referred to as a tank table in the military). Further testing will be conducted in the future to see if newer weapon vehicle systems provide increased ventilation with a resulting decrease in chemical exposure.

If you would like additional information about Soldier Exposure Assessments, contact 1LT Kopriva Marshall or MAJ Terri Cutler, DSN 584-3118, 410-436-3118, or 1-800-222-9698.



LASER AND RADIOFREQUENCY RADIATION HAZARDS COURSE

Each spring, the Laser/Optical Radiation Program (LORP) and Radiofrequency/ Ultrasound Program (RFUS) host a 4-day course, which emphasizes nonionizing radiation hazards, safety, and protection. This educational experience has been a tradition in the Army community for more than 30 years. Attendance includes personnel from the Army, Army National Guard, Army Reserves, civilians, and private industry.

The course is designed to provide a background for recognizing health risks from nonionizing radiation sources and for establishing effective control measures for these hazards. It is intended for Radiation Protection Officers, Laser Safety Officers, and related health and safety personnel whose responsibilities include nonionizing radiation protection. Particular emphasis is placed on recognizing nonionizing occupational hazards that are most commonly encountered within the Department of the Army.

During last year's course, a variety of interesting lectures included: facts and myths of the current visible laser pointer issue; biological effects of optical radiation and conventional radiofrequency radiation (RFR); the development of laser protection and RFR standards and exposure limits; medical laser safety – the associated hazards and appropriate control measures; laser hazard classification; laser eye protection; laser range controls; RFR antennas and patterns; RFR hazard evaluation and site surveys; RF generation and propagation; and RFR systems applications.

The course also features a full day of laboratory demonstrations and a nighttime laser demonstration. These demonstrations give the students a visual, hands-on, realistic conception of the potential nonionizing radiation hazards in the occupational environment.

This year's course will be offered on April 10-13 in Edgewood, MD. DSN 584-6647, 410-436-6647, or 1-800-222-9698. email: Mary.Gray@apg.amedd.army.mil, Internet: http://chppm-www.apgea.army.mil/trng/describe.crs/d6h_f17.htm.

Mr. Steve DiDomenico demonstrates a laser hologram.

USACHPPM-EUROPE

MILITARY PREVENTIVE MEDICINE

The 5th Meeting of the COMEDS Working Group on Military Preventive Medicine (WP-MPM) was held on 1 - 4 November 1999. The United States hosted the meeting at Bethesda, Maryland. Colonel Terry M. Rauch, Commander, USACHPPM-Europe, was the Chairman for the WP-MPM. The Commander, USACHPPM-Europe, assumed duties as the U.S. representative and chairman in 1998.

The Working Group consists of 19 North Atlantic Treaty Organization (NATO) military preventive medicine officers representing their respective Surgeons General in the development/discussion of NATO policy and issues relating to military preventive medicine. The WG-MPM is one of 11 COMEDS medical working groups.

Rauch organized and conducted the annual working group meetings and will attend the COMEDS General Plenary Session. He will brief the General Plenary on all issues/outcomes. Topics included: establishment of minimum essential standards for pre- and post-deployment medical screening, development of a NATO Field Hygiene and Sanitation Handbook, development of NATO vaccination strategies, the effective use of the EPINATO System to track disease and non-battle injury (DNBI), and the identification of a central repository to archive EPINATO information.

Dr. Gerhard Heyl, COL, from Germany, has been a member of this Working Group for 16 years, 11 of which were as chairman. When asked what he hoped to accomplish by attending the NATO meeting, he said, "I hope to establish new contacts and update information with respect to PM, to contribute to our common effort to outline the importance of PM especially when facing new out-of-area deployments, and agree to standardize certain key PM issues, i.e. gathering special information on communicable diseases or common vaccination policy."

Dr. Greg Cook, LtCol, from Canada, said: I feel positive about this meeting as we develop new procedures. The value of PM is increasing. We can now share ideas, experiences, and lessons learned with a view to standardize procedures and doctrines within the NATO operations. There are so many different levels of expertise."

LTC Ashley M. Croft, England, said: "It is important to maintain and improve the health of troops in war and peace. The individual soldier must be fit and healthy and we must keep them healthy and even healthier. We have achieved PM goals and contained communicable disease." He referenced his article, Hospitalization of British Troops during Operation Joint Endeavor (Bosnia), *Military Medicine*, vol. 164, July 1999.

Dr. Faludi Ga Bor, COL (Hungary), an epidemiologist, said: "I have worked on many different working groups. It is very important to discuss PM in the developmental stages and the early planning of work. I can compare the work my Institute deals with in public health with NATO medical

policy. It is important to go to the NATO conferences and to collect principles and lessons learned."

Rauch said the Working Group achieved significant results. He said, "My fundamental operating principle was that of common commitment and mutual cooperation among the representatives from each of the member states. Our work over the last few days, as it is carried forward, will result in a significant revision to the NATO vaccination strategy, the establishment of minimum essential standards for pre- and post-deployment medical screening, a NATO Field Hygiene and Sanitation Handbook, and a cooperative plan for the immediate analysis of disease and non-battle injury (DNBI) data from Bosnia and Kosovo at USACHPPM-EUROPE. In the end, it is important for all of us to realize that no member country is forced to rely upon its own national efforts alone in dealing with basic preventive medicine challenges. This is becoming increasingly important today with our focus on NATO collective crisis management and peacekeeping."

(front row) COL Robert Gum (USA); Dr. Ga'Bor Faludi, COL (Hungary); Lt Col Paulo M. Matricardi (Italy); Maj Christian Carton (Belgium); Major Sten Hulgard (Denmark); Lt Col Gouvas Konstantinos (Greece); MAJ Laurie Cummings (USA) (second row) Lt Col Greg Cook (Canada); LTC Michael K. Faulde (Germany); Maj Bjom T. Kristianson (Norway); CPT Miroslaw Dziekiewicz (Poland); COL Terry Rauch (Chairman - USA); LTC Javier Alsina Alvarez (Spain); COL Gerhard Heyl (Germany) (third row) LtCol Jean-Paul Boutin (France); LtCol Larry Kim (USA); LCDR Randy Hyer (USA); LtCol H.W. Poen (Netherlands); LtCol Antonio Silva Graca (Portugal); LtCol Victor MacIntosh (USA); LTC Ashley A. Croft (England) (fourth row)COL V. Radovnicky (Czech Republic); COL David M. Lam (USA); LtCol Robert Thompson (USA); LtCol Jeffrey Unger (USA)

USACHPPM-Europe Personnel

Serving the Soldier, Sailor and Airman in Europe.

USACHPPM-EUR is the premier forward-deployed platform for providing integrated, comprehensive, future-oriented services for health promotion and preventive medicine programs to the military, their families, and the civilian work force located in Europe, Africa, and the Middle East.

Providing comprehensive remote and on-site consultations and services, USACHPPM-EUR supports garrison and deployed American forces in the areas of environmental health sciences, medical entomology, industrial hygiene, radiation protection, epidemiology, occupational health, medical surveillance, laboratory sciences, and health promotion and wellness programs. Field offices are collocated with the Area Support Groups and major Medical Department Activities throughout Europe, affording direct on-site occupational health, industrial hygiene, and health promotion services to the commanders and communities.

Comprised of 37 military and 160 civilians, local nationals, and other professional staff, the USACHPPM-EUR stands ready to respond rapidly and effectively in support of U.S. Armed Forces deployed or stationed throughout the theater of operations of the U.S. European Command and the U.S. Central Command. A short narrative of the many disciplines the organization has available, along with the name, photo, and telephone number of the respective chief, is provided on the following pages.

Commander, COL Terry Rauch
DSN 486-8084

Dep. Commander, COL Robert Gum
DSN 486-8084

Sergeant Major, SGM Mark Rook
DSN 486-8961

Department of Environmental Sciences

Chief, LTC Robert Pipkin
DSN 486-8956

The overall purpose of our Department is to assess and reduce the health risks resulting from hazardous conditions in our military and civilian community environment, and to provide timely solutions with the support of our professional staff. We are organized into four distinct divisions.

LTC Laurie Cummings
DSN 486-7045

Environmental Engineering Division - Provides support for the environmental health engineering aspects of water supply, wastewater, hazardous waste, ground water and solid waste, health risk assessment, air pollution, and ambient air quality management.

Entomological Sciences Division - Provides support to protect the soldier, military community, and environment from vector-borne diseases, nuisance pests, and the toxic effects of pesticides.

LTC Leon Robert
DSN 486-8540

LTC Heidi Overstreet
DSN 486-8307

Field Preventive Medicine Division - Serves as the coordination point for all field preventive medicine issues and provides comprehensive industrial hygiene services to deployed soldiers.

MAJ Paul Hulkovich
DSN 486-8551

Radiation Protection Division - Protects the soldier from the hazards associated with equipment containing radioactive materials or producing ionizing radiation and against the health hazards from laser/optical radiation, radio frequency radiation, and ultrasound-producing sources.

Department of Laboratory Sciences

Chief, Dr. Charles Statham
DSN 486-8371

The Department provides quality laboratory data in support of the Department of Defense (DoD) Force Health Protection program in Europe. DLS operates a nationally and internationally accredited analytical laboratory operating under an ISO 9000 registered quality system, capable of providing comprehensive analytical services for the Tri-services in the European Command and Central Command theaters of operation.

Customer Support Division
Mr. Kurt Berry
DSN 486-8381

Inorganic Chemistry & Toxicology Division
CPT Gretchen Benner
DSN 486-7744

Organic Chemistry & Toxicology Division
Chief, Dr. Heinz F. Stahl
DSN 486-7259

Quality Assurance Divison
Ms. Susan Smith
DSN 486-7771

Department of Medical Sciences

Chief, LTC Linda Pierson
DSN 486-8113

Modernized with state-of-the-art equipment and the technical experts to support the USACHPPM-Europe Medical Sciences mission, we assist commanders in providing a safe, healthy work environment for the theater's soldiers and civilian employees. In addition, Medical Sciences is responsible for providing a comprehensive medical surveillance program in garrison and providing the rapid response disease and outbreak investigation in Europe. Our offices are located at our USACHPPM-EUR Headquarters (Landstuhl, Germany) and at Field Offices located at the Area Support Groups.

LTC John Wempe
DSN 486-8546

Epidemiology - Enhancing the health of the Army community in Europe by providing quality theater-wide disease and injury surveillance information to commanders and health care authorities.

Hearing Conservation - Preventing noise-induced hearing loss among USAREUR personnel, as well as providing information and services to commanders and medical personnel to assist them in executing effective hearing conservation programs to ensure soldier readiness.

Mr. Troels (Wayne) Loyborg
DSN 486-8550

Ms. Joyce McGrew
DSN 486-8546

Occupational Health Program – Reducing the risk and incidence of work-related illness and injury in the workplace through effective management of the Occupational Health Program for USAREUR personnel.

Industrial Hygiene Division - Protecting the soldier - and the military community - from excessive occupational exposure to chemical, physical, and biological contaminants, and providing industrial hygiene planning input to the industrial mobilization base.

Ms. Nancy Hammond
DSN 486-8546

LTC Robin Drescher
DSN 486-8545

Vision Conservation - Preventing work-related eye injuries, enhancing visual performance, and ensuring readiness for USAREUR personnel.

Department of Health Promotion and Wellness

Chief, Ms. Laura Mitvalsky
DSN 486-7099

Health Promotion & Wellness provides a coordinated health promotion effort to support the combat soldier with the goal of maximizing the fighting strength by minimizing health risks. This support extends to the Total Army Family. To minimize health risks, the Health Promotion Program emphasizes maximizing healthy lifestyles by a combination of efforts to enhance awareness, change negative behavior, and create an environment that supports good health practices. The DHPW focuses on helping people change their lifestyle to move toward a state of optimal health, that is a balance of physical, emotional, social, and spiritual health.

Department of Administrative Services

Chief, Mr. Ken Croft
DSN 486-7272

Providing all administrative and technical service and support functions for the organization, the department's primary areas of responsibility are: financial and resource management, civilian and local national payroll and personnel administration, information management, and medical illustration. DAS has two divisions; the Information Management Division, which manages and administers all network, telecommunications and information systems; and the Medical Illustration Division, which provides medical photography, illustration and graphics support to a variety of medical units throughout Europe.

RUSSIA FAR EAST ECOLOGY PROJECT

The mission of the Russia Far East Ecology Project, an extension of Operation Provide Hope, is to promote bilateral relations between U.S. Pacific Command (PACOM) and the Russia Far East. The Primorski Krai Department of Health (DOH) in Vladivostok requested support in conducting a health assessment in several health areas in and around Vladivostok where they suspect that the population is at higher health risk from environmental exposures, such as lead.

In response to this request for technical and humanitarian assistance, PACOM chartered and assembled a multi-service preventive medicine (PM) team from elements throughout the Pacific Theater. The team consisted of members from USACHPPM-PAC; Detachment 3, 311th Human Systems Wing, Kadena Air Base, Okinawa; Navy Environmental and PM, Unit 6, Pearl Harbor, Hawaii; Marine Forces Pacific, Camp Smith, Hawaii; and the Honorary Consul General of the Russian Federation from Hawaii.

MAJ Kay Burkman, Chief, Health Promotion and Disease Surveillance Division, and Dr. Prakash Temkar, Environmental Health Engineering Division, deployed to Vladivostok as part of the joint team.

The initial phase of the project was conducted from 28 August – 7 September 1999 in Vladivostok. During this phase, the main objective was to collect environmental lead exposure data and attempt to relate that data to six individual kindergartens that were studied for health risk assessments.

The general framework called for test samples to be collected and analyzed for lead from air, water, soil, painted surfaces, dust, and the blood of select children and pregnant women. During the 11 days that the team was in Vladivostok, members collected 1,342 samples using various sampling media. Ninety-six (96%) of the samples were analyzed or screened on-site and the data were provided to the Primorski Krai DOH before the team departed Russia. Samples were also sent to the Environmental Laboratory Division, USACHPPM-PAC, for more detailed testing and analysis.

In addition to conducting initial baseline testing and developing a data analysis program, a critical component of the mission was training approximately 40 Russian scientists and public health officials to continue the lead testing after the U.S. team left Vladivostok. Russian personnel were trained to operate and maintain the collection media that included total suspended particulate (TSP) air samplers and minivol PM-10 air samplers. By the conclusion of the trip, Russian personnel were performing

all aspects of the data collection from setting up and maintaining the collection equipment to shipping the collection media out for analysis.

The team developed and implemented an epidemiological study plan for determining the impact of any discovered lead in the test population. Using the hard data collected by the joint U.S./Russian health teams and the aggressive study protocol, team members expect to bound and quantify the extent, if any, of the environmental health impact of lead on the children at the kindergartens being studied.

The Vladivostok project was the first joint humanitarian effort for USACHPPM-PAC and our first project in Russia. The project provided excellent training for all the participating Pacific-based PM units in joint planning within PACOM's operational umbrella, developing and executing common goals and program objectives, and allowing each unit to work in not only their specific area of expertise, but as a member of a large overall project. The result was a highly skilled, interdisciplinary team that was focused on efficiently and accurately gathering the pertinent data to assess the environmental health impact on the population in Vladivostok.

Currently there are plans for the joint team to return to Vladivostok one or two times per year. Specific short-term projects have already been scheduled for Fiscal Years 00 and 01. The next step in the project is to expand and develop the fledgling environmental program in Vladivostok, using it primarily to monitor health risks and to develop long-term courses of actions for improving the health of Vladivostok residents.

The successful completion of the initial phase of this project is owed, in part to the excellent support provided by the Deployment Environmental Surveillance Program (DESP), USACHPPM-Main. Air monitoring equipment, training, and analytical support were provided by the DESP. POC: Dr. Prakash Temkar, DSN 263-8551.

ORIENT SHIELD 2000

The USACHPPM-Pacific is unique in that we have both a regional support mission for the Pacific Theater and direct installation-level PM support responsibilities to U.S. Army, Japan (USARJ). This is because of the consolidation in January 1999 of the MEDDAC-Japan PM section with USACHPPM-Pacific. One of the many specific taskings that this consolidation created is the responsibility for providing direct PM support for all bilateral training exercises conducted between the U.S. Army and the Japan Ground Self-Defense Force (JGSDF). For the most recent bilateral exercise, Orient Shield 2000, the Environmental Health Engineering Division (EHED) provided two soldiers, SSG George Deguzman and PFC Marshelle

Fisher, to accomplish this mission. The support provided included: participation in all pre-exercise planning; pre-inspections of all of the facilities to ensure proper sanitation and hygiene standards; direct support to ensure that proper sanitation and hygiene practices were being implemented and maintained; and PM input for the final AAR on the exercise to ensure that any lessons learned from the exercise are included in the planning for future exercises.

Orient Shield 2000 took place in November 1999 at Camp Kami-Furano, located on the northern Japanese island of Hokkaido. The Camp is utilized by the JGSDF as a permanent installation, so fixed facilities were available for the exercise participants. Approximately l,400 soldiers from both the U.S. and Japan were scheduled to participate in the exercise, with the U.S. troops coming from units already stationed in Japan (who mainly provided support services) and from the 25th Infantry Division stationed at Schoefield Barracks, Hawaii. During the pre-inspection, which took place over a month before the exercise was scheduled to begin, SSG Deguzman inspected the barracks where the soldiers would be staying, bathing facilities, dining facilities, and the water and wastewater treatment systems. He also conducted cold-weather injury prevention courses at Camp Zama and Sagami General Depot for the units from USARJ that would be supporting the exercise. (Hokkaido has a very cold climate, and temperatures during the exercise were expected to be below freezing.)

When the actual exercise started in November, SSG Deguzman went up with the support elements from Camp Zama. He was officially attached to the USARJ medical cell, but he also worked very closely with the 35th Supply and Service Battalion, which was responsible for all base support during the exercise. He conducted daily inspections of the dining and bathing facilities, as well as the water supply (both the fixed supply and the water buffaloes that were used in the maneuver areas). He also handled PM-related questions from the units. One of the first things that he did upon arriving at the site was to determine that there were two separate water supply systems available: one that was potable (which he tested to make sure it met water quality standards) and one that was nonpotable (which was used for cleaning and to operate the toilets). He immediately posted signs on all the nonpotable supply points and continuously monitored them to make sure that the soldiers were not drinking water from the nonpotable sources. Another issue that arose during the exercise was the operation of the installation wastewater treatment plant. Because of the relatively large population of soldiers who were participating in the exercise compared to the regular population of the installation, the plant was emitting foul odors that were causing a lot of complaints from the participants. He briefed individuals on why the odors were being produced and explained how they could keep from further overloading the plant during the remainder of the exercise.

Since this was a bilateral exercise and it was taking place on a Japanese installation, much of his work involved dealing with our Japanese allies who ran the facilities. Speaking different languages was a constant challenge, but being stationed in Japan prepared him well. He was able to work with (and through) his JGSDF counterparts to take care of the issues and in the process both sides gained from the experience.

Apart from the difficulties associated with working in different languages, there were other issues. One that we are all familiar with is getting the soldiers to wash their hands prior to using the dining facility. Another was making sure that the soldiers were sleeping in opposite directions in the barracks (head to foot arrangements). An issue that was unique to Japan was the bathing facilities. Each barracks had showers, but they also had large hot tubs (called ofuros). In Japan, the way people bathe is to wash off thoroughly in the showers, and then they take a nice relaxing soak in the ofuros. Since everyone is supposed to be clean before they get into the ofuro, the water is only changed once a day. Most Americans are not familiar with this practice; therefore, many American soldiers were actually bathing in the ofuros. Educating the soldiers on the proper use of the bathing facilities became an essential PM measure. In addition to education, it was also imperative to involve the units' chains-of-command.

Participating in Orient Shield was a good experience for all individuals deployed in support of the exercise. This type of support offered an exceptional opportunity for the 91Ss assigned to USACHPPM-Pacific to engage in field PM and practice all of their basic skills. Additionally, it was an excellent way to demonstrate to the USARJ commander the unit's value to him in a very tangible way. There are more bilateral field training exercises scheduled that USACHPPM-Pacific will support in FY00. This unique opportunity will enable many of our soldiers to go to the field and do what we are all trained for: **Protect the Force.** POC: SSG George Deguzman, DSN 263-8551.

PACIFIC WARRIOR (PW)

Pacific Warrior (PW) was a joint Service field training exercise (FTX) coordinated and organized by the Pacific Regional Medical Command (PRMC) to exercise unified medical assets of air, land, and sea operations integrated with state of the art Information Technology. Over 1,400 active duty, reserve component personnel, and contractors jointly participated in PW during the period of 4-21 November 1999. This year marked the first time that a military medical field exercise of this magnitude was conducted in the state of Hawaii. Pacific Warrior was designed to simulate medical operations anticipated on the Korean Peninsula in the event of a military contingency.

The PRMC established a realistic environment consisting of a comprehensive medical Task Force with Echelon III capability that could support a scenario that has a rapid medical build up in a maturing theater of operations, in anticipation of combat operations. Throughout the PW exercise, there were *real world* and scenario operations incorporated into the exercise to create an austere and nonlinear operational environment.

The USACHPPM-Pacific provided two personnel to support the operational functions. LTC Thomas Little, Deputy for Technical Services, and SSG Holly Bruce, PM/Health Physics Specialist (91SN4), were both instrumental in conducting training in field PM, radiation protection, and humanitarian assistance to PM personnel from all three Services during the training phase. LTC Little functioned as the JTF Medical Command Environmental Science Officer/Observer/Controller (OC). As an OC, LTC Little was responsible for assessing the reaction and response of the PM personnel to the various PM inserted into the FTX. The following are examples of PM scenarios inserted into the exercise and assessed by LTC Little:

The 121st TF Hospital Commander has frantically approached you as the Environmental Science Officer to request your assistance in determining a means to dispose of used sharps. It appears that the Hospital did not deploy with an adequate amount of sharp containers, and no contract to assist with disposal of the sharps can be established for another 20 days. The Commander requires a recommendation within 10 minutes. *How would you respond to the Commander?*

The 1st SGT has just informed you that he overheard some soldiers talking about seeing rodents in the field dining facility. To compound the situation, several troops have indicated to the 1st SGT that they are refusing to eat any food from the dining facility for fear of potential rodent contamination. The Hospital Commander and the 1st SGT request your assistance and guidance in addressing this issue. *How would you address this situation?*

LTC Little and SSG Bruce both considered PW a tremendous success, and gained invaluable learning experiences. They commented on several of the lessons that they learned:

Personnel from USACHPPM-Pacific should attend the 1week OC course at Camp Parks, California. This initiative would enable personnel to become thoroughly familiar with the responsibilities and roles of an OC.

A minimum of 2 OC knowledgeable about field PM are required to assist in working shift hours to observe and control messages that are inserted on a daily 24-hour period.

Rock drills function as an invaluable tool to assist in ensuring familiarity of various planning stages required to accomplish mission objectives.

LTC Little summarized his participation in PW by stating, "a vision to accomplish a field training exercise the magnitude of PW came to reality, and soldiers are now better prepared to confront some of the many challenges on the battlefield."
POC: LTC Thomas Little, DSN 263-8489.

USACHPPM-South

ROAD SAFETY
AN ISSUE FOR SOLDIERS AND FAMILIES TRAVELING ABROAD

Road safety is a critical topic for the U.S. Army and its soldier and family members who frequently travel abroad. There are alarming numbers of road fatalities and accident rates in developing countries due to poor road conditions, irresponsible driver behavior, and inadequate safety measures.

Statistics indicate that the single greatest cause of death and serious injury when traveling abroad is from road accidents, far exceeding the number of deaths resulting from disease, violence, or terrorism. Road safety encompasses more than driver and passenger accidents. Road safety includes motorcycles, bicycles, and pedestrian safety. Serious injuries and accidents are just as likely to occur when riding as a passenger, particularly due to driving habits and poor vehicle maintenance.

Most organizations and corporations educate their representatives on risk of travel abroad and recommend PM such as immunization. However, few organizations include road travel information and awareness in travel briefings.

As Commanders, supervisors, and employees of the U.S. Army, we all have a responsibility of promoting preventive road safety in the U.S. and abroad. Our goal should be to provide information to assist road users in making sensible decisions regarding their behavior on the road. We can increase the perceived risk of being involved in an accident through the portrayal of crashes and their consequences. The purpose is not to criticize, but to ensure that we all remain safe drivers.

Contributing factors to road accidents:

Drinking and driving - despite publicity and laws, blood alcohol concentration (BAC) remains a major contributor to road death and injury.

Speed - represents 20 percent of all fatal crashes in about one third of single vehicle crashes.

Fatigue - most accidents that occur from fatigue occur during normal sleeping hours. Lack of sleep is the major contributor.

Concentration - is always key particularly during poor visibility.

Seatbelt - individuals that don't wear seatbelts are four times as likely to be killed in a crash.

Rural areas - roads and surrounding areas contribute to one third of crashes.

Drugs and prescriptions - are known to have an effect in crashes and appear to be represented equally in post mortem examinations.

Actions that reduce road accidents:

Have your eyes tested at least once every 2 years.

If you need glasses for driving, make sure you always wear them.

Talk with your pharmacist or doctor about the effect of medication on your driving. Sometimes alternative drugs are available that can help you drive more safely.

To improve visibility, make sure you use your mirror and always check your blind spots by looking over your shoulder.

If traveling in a foreign country, brush up on new road rules with a traffic handbook Choose the safest route.
Keep your windows clean and free from cracks.

Avoid driving in heavy rain. Fog, sunset, and sunrise all have poor visibility.

References:

1. The Association for Safe International Road Travel

2. Public Transportation Corporation

This is one of the many ideas that the Health Promotion and Wellness Section is developing for implementation in a travel medicine clinic. We are still exploring what types of ideas are already in use, but would like to also create programs not yet available. If you would like to share your travel medicine program, please contact: MAJ Sharon L. Sterling, DSN 367-2310 or 404-464-2310.

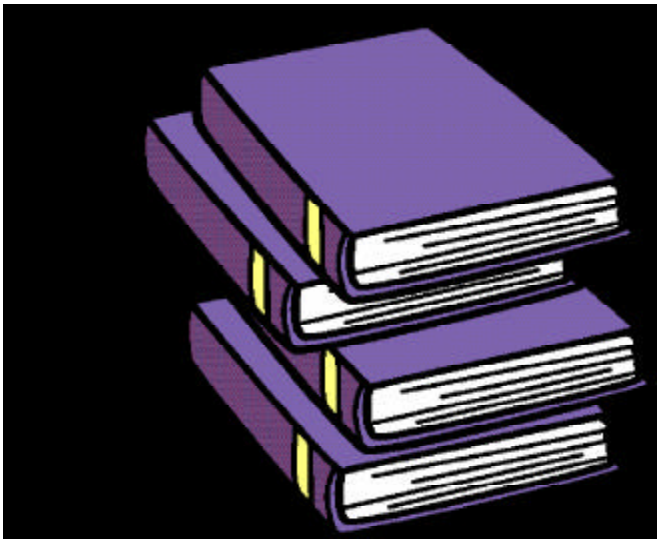
USACHPPM-West

HANTAVIRUS UPDATE

During FY 99, members of the Entomological Sciences Division conducted hantavirus surveys on 8 military installations, bringing the total number of installations surveyed for this disease to 43 in the past 6 years. In FY 99, 16 species of rodents were captured and processed for hantavirus with the majority (79%) comprising the species *Peromyscus maniculatus*, the deer mouse. This species was positive for hantavirus at 7 of the 8 installations, reflecting past data that show this mouse as the primary carrier of the hantavirus agent. With its propensity to inhabit seasonal or infrequently used buildings and structures, this mouse and its virus continue to pose a risk to military personnel working indoors in rodent contaminated facilities. USACHPPM-West continues to support efforts to identify hantavirus risk and promote public health education on protection. POC: Mr. Harrison, DSN 347-0084.

RECENT PUBLICATION

Representatives from Environmental Health Risk Assessment and Risk Communication Program, Directorate of Laboratory Sciences, and Health Effects Research Program contributed their expertise to an article published in Environmental Health Perspectives, Volume 107/No 12, December 1999. The article, The Sources, Fate, and Toxicity of Chemical Warfare Agent Degradation Products" is part of a special volume that focuses on chemical and biological warfare. POC: Ms. Hauschild, DSN 584-5213, 410-436-5213, or 1-800-222-9698.



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